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4 November 1964

TRIP REPORT

Place:

25X1

Date: 13 October 1964

SUBJECT: CONTRACT

"Coherent Light Enlarger"

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CONTACTS

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The prime purpose of the visit was to review the comparative results of test photographic prints produced on the "Coherent Light Enlarger," the "10x-20x-40x Enlarger," the [] 3x-7x Enlarger," and a conventional [] Enlarger" [] Results from the [] Enlarger were so poor that they were disregarded.

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Tests of the Coherent Light Enlarger were made in two series. One with 3-bar resolution targets and one without resolution targets.

Tests were performed in the following manner. Positive transparencies were produced on the "4x Coherent Light Enlarger," the "10-20-40x [] Enlarger," and on a 36x Microscope. These second generation positives were each variably enlarged further, as third and fourth generations, to produce glossy prints at 144x for comparison purposes. Results showed only that prints produced by the "4x Coherent Light Enlarger" and the 10-20-40x Enlarger were very nearly identical. Similar 3 stage tests without bar targets were also made. However, these final prints were each of different contrast and therefore gave no meaningful comparison.

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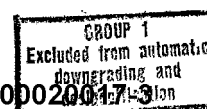
The writer feels that these tests were inconclusive and merely served as an indication that results from the "Coherent Light Enlarger" are approximately equal to results from the [] 10-20-40x Enlarger" on the basis of resolution. The contractor was instructed to devise some more valid and meaningful comparison for review at a later date.

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During this visit, the order of continued work was defined by the writer. The following 8 items were listed in order of importance under the existing contract with no increase in work scope or contract price. These items of work were to be carried on in a manner not to over spend funds in the contract.

Declass Review by NIMA / DoD

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- ✓ 1. Proof of instrument (comparative).
- ✓ 2. Diffraction control (elimination or control of artifacts and diffraction patterns).
- ✓ 3. Measurement of modulation transfer function of enlarger.
- ✓ 4. Provide set of slides showing the evolution of enlarger development.
5. Study of Spatial Filtering, only as it pertains to improvement of output performance of the existing enlarger.
- OK 6. Viewer screen (change of angle).
7. Modification of camera back to accommodate 9" x 9" and 4" x 5" cut sheets.
8. Exposure control, (a minor form that will enhance the ability of the enlarger to correct for overexposure or underexposure of original negatives.)

A memorandum prepared [redacted] describing a method by which the modulation transfer function of the enlarger might be determined. This was to be the subject of a discussion [redacted] on the following day.

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